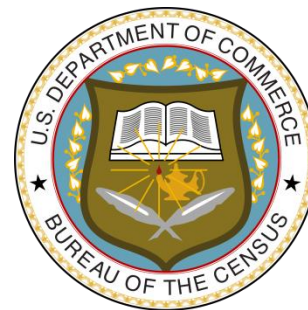




White House Initiative
Open Government Partnership
National Action Plan



National Address Database





National Address Database



- What is a National Address Database?
- How does it work?
- Why do we need a National Address Database?
- What can it be used for?
- Why now?
- Why the Department of Transportation?
- Why the Census Bureau?
- What is a Developer's Data Challenge?
- What is the purpose of this challenge?
- For more information
- Questions



What is a National Address Database?



These are all hyperlinked images



Open Government Partnership to Improve Public Services

4. **Launch a Process to Create a Consolidated Public Listing of Every Address in the United States.** Although address information for residential and commercial properties is collected across the United States by all levels of government and industry, it isn't currently compiled in an open, easily accessible format. Additionally, much of the information collected at the Federal level is prohibited from public release due to various privacy laws. **This non-private address information can be crucial to first responders and emergency service providers** and can also be useful to innovators who might use it to build tools or launch services to improve communities. **The Department of Transportation** will begin coordinating across the public and private sector; connecting agencies, industry and innovators to gain consensus on an open standard for public address information; pursuing open data strategies for sharing certain address information — excluding names and other private information; and exploring uses of this information that drive innovation and inform the public.

https://www.whitehouse.gov/sites/default/files/microsites/ostp/final_us_open_government_national_action_plan_3_0.pdf



What is a National Address Database?



A uniform, authoritative, open source dataset comprised of all commercial and residential addresses available in the public domain. This will improve public services, improve response times for emergencies, decrease government spending, reduce redundant collection, storage and maintenance of information; and, it will support emerging technologies and benefit business innovation and development.

Collect the data once and use it many times.

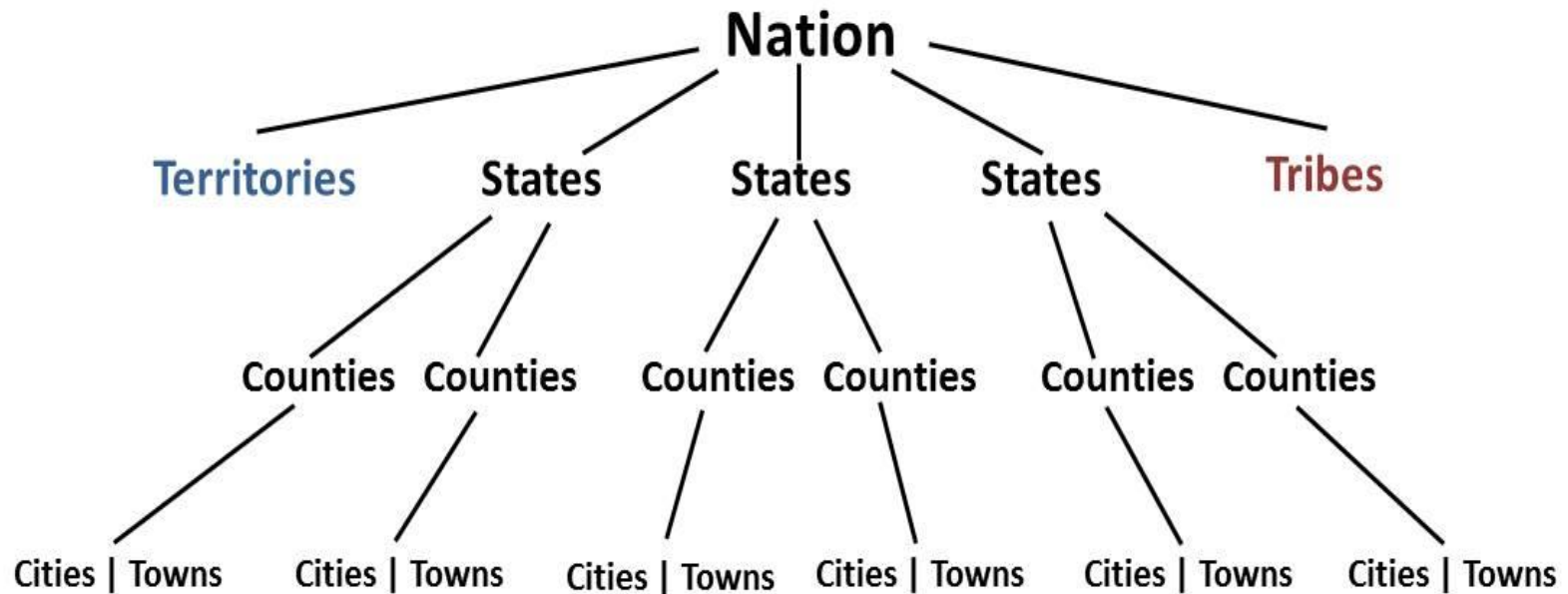
- A universal location and address schema
- Data available and open in the public domain
- Each authoritative address location has a unique ID

A **National Address Database** is a key component of building **Smart Communities** – the future of healthy and vibrant societies using integrated, geospatially layered information for better decision making and citizen engagement. It is necessary for optimizing transportation like autonomous vehicles and smart transportation networks; making environments sustainable; decreasing air and water pollution, and increasing energy and resource efficiency.

How does it work?

The National Address Database is not actually a single database. It is an architecture made up of all the independent, authoritative address datasets in the country unified into a consistent, open schema allowing necessary information to be retrieved from a single query point.

It is actually made up of thousands of independent community datasets.





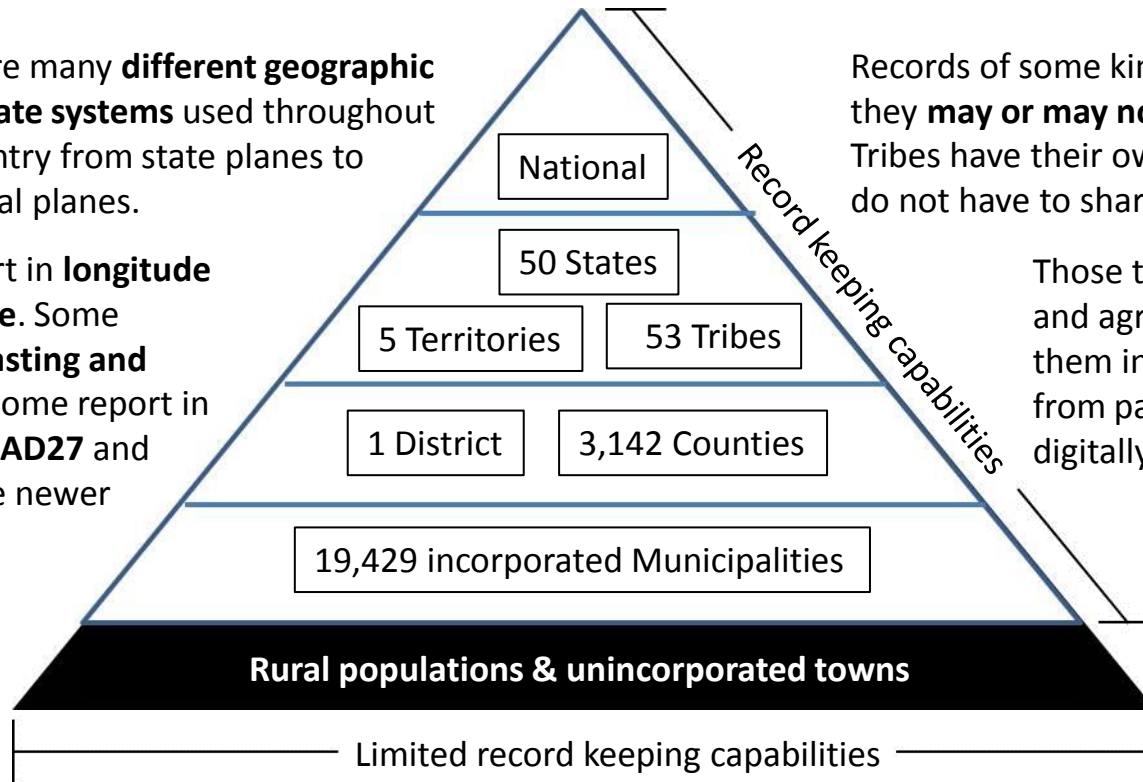
Why do we need it?

There are many **different geographic coordinate systems** used throughout the country from state planes to municipal planes.

Some report in **longitude and latitude**. Some report in **Easting and Northing**. Some report in the older **NAD27** and some in the newer **NAD83**.

Records of some kind may be kept but they **may or may not be shared**. The Tribes have their own sovereignty and do not have to share.

Those that do keep records and agree to share may keep them in a **variety of formats** from paper plat maps to digitally encrypted data



Emergencies like **Hurricane Katrina** and **Super Storm Sandy** destroyed structures and street signs proving that without **good situational awareness** rescue operations are greatly hindered. It is necessary to have a system that the **National Guard/Reserve** and **FEMA** can access to **plan their rescue operations in a more timely and efficient manner**.



Why do we need it?

- **Economic benefits of \$2 billion annually.**
 - Estimates based on studies by the Office of Management and Budget (OMB) show that the U.S. is losing \$1 billion annually through duplicating collection efforts and the costs of maintaining and storing redundant data.
 - Based on real savings in other countries with openly available address data it is estimated that the U.S. would have a positive economic benefit in excess of \$1 billion annually.
- **Sharing information makes government more efficient and less expensive.**



What can it be used for?

These are only some of the uses

- Rescue and recovery operations
- Emergency operations and first responders
- Disaster assistance relief and disaster assistance loans
- Smart utilities
- Focused alerts by the National Weather Service
- Construction, permitting and zoning
- Offender database
- Online validation of address records
- Fraud detection
- Detailed navigation and optimal routing
- School districting
- Real Estate
- Consumer Finance Protection Bureau Mortgage recordation
- Containment of health outbreaks and the spread of disease.



What can it be used for?



These are only some of the uses

- The base framework upon which SmartCities can be built
- Smart appliances, smart sensors, smart utilities
- Smart homes, smart offices
- Sustainable communities, energy recovery and conservation
- Citizen engagement tool to connect with local authorities
- Forms the framework for connecting the Internet of Things
- Autonomous vehicles: cars, buses, drones, shipping and trains
- Augmented reality: overlaying information atop imagery
- Drone air traffic control system to deliver and avoid



Why now?

- **Disaster Assistance and Recovery**
 - Natural disasters are becoming more deadly and costly
 - Lessons from Hurricane Katrina, Super Storm Sandy, Indian Ocean Tsunami, Oso Mudslide, Joplin Tornado
- **Reduce costs of government**
 - Decrease redundant collection efforts, storage and maintenance of the same or similar information.
- **Improved coordination among all levels of government**
- **Advancements in Technology and Support for Emerging Technologies**
 - Greater storage capacity, faster processing power, advanced software, cloud connected capabilities, geospatial information systems
 - The evolution of integrated and connected technologies



Why the Department of Transportation?



The **U.S. Department of Transportation** was identified as the primary agency for the effort in the President's *Open Government Partnership, National Action Plan, Third Round (27 Oct 2015)* which is currently being implemented.

Commercial and residence addresses are how location is identified in relation to a transportation network which is a primary function of the Department of Transportation.

The **National Address Database** will also support the work being done by the USDOT for the **Next Generation 9-1-1** emergency management system.

Privacy and protection laws prevent certain government agencies from disclosing their records.

Private companies like **Open Street Maps, Google Maps, Bing Maps** and **Apple Maps** have proprietary and licensing restrictions on their information.



Why the Census Bureau?



The **U.S. Census Bureau** has been the stewards of the nation's data since the Census Act of 1840 and its authorities are codified in the U.S. Constitution.

The **U.S. Census Bureau** was the first agency to make its data available on the public domain as the Topologically Integrated Geographic Encoding and Referencing (TIGER) files.

The **U.S. Census Bureau** has a sworn duty to protect personally identifiable information under Title 13 of the Code of Federal Regulations and cannot release personal information prior to 72 years after it is collected.



What is a Developers Challenge?



A challenge is a competition opened to the general public under the authority of the **America COMPETES Act**.

A Developer's Data Challenge is a specific type of competition that invites **developers and coders** to showcase their talents and compete for prizes and awards in order to solve a specific problem set.

The specifics of the challenge are defined in an announcement that is published in the Federal Register [**Place holder:** <https://www.federalregister.gov>].

When the announcement for the Open Address Information Developers Challenge is published a link to the rules, regulations and eligibility of the competition will be made active on the main page of the Open Address Information Challenge webpage [www.DOT.gov/NAD] along with the link to the Federal Register. An email will also go out to all those who have signed up on the Open Address Information listserve.



What is the purpose of this challenge?



There are about 92 million authoritative address records available online in the United States of America which constitutes the core of the National Address Database. The remaining business and residential addresses are not available because they are in a format that is not compatible with the digital age, i.e.: paper records and plat maps, or because the local community lacks the funding, manpower, expertise and/or technological resources to make those records available.

To augment this effort it is necessary to build a **mobile/web-based application** that **allows individuals to report** commercial and residential addresses and locations; as well as, police, firemen, city officials, utility companies, FEMA Corps, GIS advocates and citizen support groups like the Boy Scouts and Girl Scouts of America.

The application needs to be easy to use, agile and adaptable; and fulfill the minimum content requirements which can be found at:

<http://www.DOT.gov/NAD/Challenge/minimum-content-requirements>.



Sponsors & Partners

For more information



Call for Sponsors

If you are interested in working with the U.S. Department of Transportation on this developers challenge and want to help incentivize the awards and prizes being offered please visit the **Sponsor & Partner Presentation**.

Call for Proprietary Partners

If you are a company interested in working with the U.S. Department of Transportation and would like to make your products or services available to the participants of the developers challenge to use to for building application solutions then please visit the **Sponsor & Partner Presentation**.

Call for Outreach Partners

If you are a company, college or university, organization, group or individual and are interested in working with the U.S. Department of Transportation to help spread the word and/or can offer material support for possible events please visit the **Sponsor & Partner Presentation**.

The Sponsor/Partner webform:

<https://www.transportation.gov/nad/sponsor-partner-form>



Developers & Contributors

For more information



Call for Developers

If you are a developer of any kind a can create a web-based or mobile application that can fulfill the basic minimum content requirements and you have a GitHub account then please see the **Developer & Contributor Presentation**.

Call for Contributors

If you have skills and expertise helpful to a developer but do not have the complete skillset necessary to develop a web-based or mobile application and you would like to enter the challenge in a support role then please see the **Developer & Contributor Presentation**.



Media & Observers

For more information



Call for Media

If you are a media person who would like to cover the story and would like more information then please visit the **Media Relations Presentation**.

Observers

If you have an interest in this subject and would like to stay informed on the topic then please sign-up on the listserve for the National Address database and you will receive emails as pertinent information becomes available.



Questions?



If you have general questions about the National Address Database then please enter your comments and questions on the **National Address Database Comment Forum**. We will answer your question as soon as time permits and may add your question to the FAQ section.

If you have specific questions about the developers challenge then please enter your questions and comments on the **Open Address Information Developers Challenge Forum** which is open only to those who have registered for the challenge and we will answer them as soon as possible and may add the question(s) to the Data Challenge FAQ section.



National Address Database



Thank you



National Address Database



Resources

<http://www.data4sdgs.org/>

<http://www.opengovpartnership.org>

<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

<https://www.fgdc.gov/ngac/meetings/december-2012/NGAC%20National%20Address%20Database%20Paper.pdf>

<https://www.fgdc.gov/ngac/meetings/december-2014/ngac-national-address-database-use-case-paper-december-2014.pdf>